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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,354	07/21/2003	Yoshihiro Hosaka	9500/0M831US0	9226
7278	7590	09/11/2007	EXAMINER	
DARBY & DARBY P.C.			FRENEL, VANEL	
P.O. BOX 770			ART UNIT	PAPER NUMBER
Church Street Station			3627	
New York, NY 10008-0770			MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/624,354	HOSAKA, YOSHIHIRO	
	Examiner	Art Unit	
	Vanel Frenel	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07212003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. This communication is response to the application filed on 07/21/03. Claims 1-28 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spira et al (2003/0172002) in view of Cornett et al. (5,216,612).

(A) As per claim 1, Spira discloses a centralized maintenance parts management system comprising: a warehouse facility for storing, in a centralized manner, a maintenance part for a plurality of types of machines located at a plurality of plants (See Spira, Fig.2, Page 6, Paragraph 0089); a necessary parts management device for managing information about whether said maintenance part is necessary for said machines (See Spira, Page 8, Paragraph 0113).

Spira does not explicitly disclose that a parts shipment management device for specifying a maintenance part to be shipped from said warehouse facility based on said management information in said necessary parts management device.

However, this feature is known in the art, as evidenced by Cornett. In particular, Cornett suggested that a parts shipment management device for specifying a maintenance part to be shipped from said warehouse facility based on said management information in said necessary parts management device (See Cornett, Col.5, lines 24-45; Col.15, lines 50-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Cornett within the system of Spira with the motivation of allowing maintenance operation to be integrated into production in an intelligent manner. When used, production efficiency is maximized as is the use of available maintenance manpower. Engineering changes and machine upgrades are easily accommodated and spare parts inventory is kept at a minimum with minimum waste of spare parts (See Cornett, Col.6, lines 17-25).

(B) As per claim 2, Spira discloses the centralized maintenance part management system further comprising an order management device for determining a maintenance part to be ordered and a quantity thereof based on inventory information of said maintenance part to be ordered in said warehouse facility or based on said management information in said necessary parts management device (See Spira, Page 26, Paragraph 0341).

(C) As per claim 3, Spira discloses the centralized maintenance part management system wherein: said order management device allows input of a target value for a total

price of said maintenance part stored in said warehouse facility (See Spira, Page 26, Paragraph 0340); and when determining said quantity of said maintenance part to be ordered, said quantity of said maintenance part to be ordered is reduced according to set conditions so that said total price of said maintenance part stored in said warehouse facility approaches said target value (See Spira, Page 25, Paragraphs 0330-0332; Page 26, Paragraph 0346).

(D) As per claim 4, Spira discloses the centralized maintenance part management system wherein: said order management device estimates a quantity of a maintenance part needed based on at least one of a change in a quantity of said maintenance part to be shipped from said warehouse facility, a change in a maintenance inspection of said machines, and a change in an operating status of said machines (See Spira, Page 25, Paragraph 0239); and said order management device determines said maintenance part to be ordered and said quantity thereof (See Spira, Page 26, Paragraph 0348).

(E) As per claim 5, Spira discloses the centralized maintenance part management system further comprising an inspection period management device for storing information relating to periodic inspection periods for said machines, wherein when there is a new machine to be managed in one of said plants, said inspection period management device uses said information relating to said periodic inspection periods for said machines to determine a periodic inspection period for said machine to be newly managed that is offset from said periodic inspection periods of said machines

(See Spira, Page 26, Paragraphs 0344-0346).

(F) As per claim 6, Spira discloses the centralized maintenance part management system wherein said necessary parts management device stores and maintains plant-by-plant inventory information indicating a quantity of said maintenance part stored in said plurality of plants and uses said plant-by-plant inventory information to evaluate whether said maintenance part is necessary (See Spira, Fig.2; Page 10, Paragraphs 0136-0137).

(G) As per claim 7, Spira discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as a maintenance inspection progresses, when a single machine needs said maintenance parts to be shipped successively during said maintenance inspection (See Spira, Page 21, Paragraph 0278).

(H) As per claim 8, Spira discloses the centralized maintenance part management system, wherein said warehouse facility is an automated warehouse (See Spira, Page 22, Paragraph 0284).

(I) As per claim 9, Spira discloses the centralized maintenance part management system wherein: said order management device estimates a quantity of a maintenance part needed based on at least one of a change in a quantity of said maintenance part to

be shipped from said warehouse facility, a change in a maintenance inspection of said machines, and a change in an operating status of said machines (See Spira, Page 25, Paragraph 0239); and said order management device determines said maintenance part to be ordered and said quantity thereof (See Spira, Page 26, Paragraph 0348).

(J) As per claim 10, Cornett discloses the centralized maintenance part management system further comprising an inspection period management device for storing information relating to periodic inspection periods for said machines, wherein when there is a new machine to be managed in one of said plants, said inspection period management device uses said information relating to said periodic inspection periods for said machines to determine a periodic inspection period for said machine to be newly managed that is offset from said periodic inspection periods of said machines (See Fig.9; Fi.11; Col.4, lines 39-49).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(K) As per claim 11, Cornett discloses the centralized maintenance part management system further comprising an inspection period management device for storing information relating to periodic inspection periods for said machines, wherein when there is a new machine to be managed in one of said plants, said inspection period management device uses said information relating to said periodic inspection periods for said machines to determine a periodic inspection period for said machine to

be newly managed that is offset from said periodic inspection periods of said machines (See Cornett, Col.2, lines 26-50).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(L) As per claim 12, Cornett discloses the centralized maintenance part management system, further comprising an inspection period management device for storing information relating to periodic inspection periods for said machines, wherein when there is a new machine to be managed in one of said plants, said inspection period management device uses said information relating to said periodic inspection periods for said machines to determine a periodic inspection period for said machine to be newly managed that is offset from said periodic inspection periods of said machines (See Cornett, Col.10, lines 25-57).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(M) As per claim 13, Spira discloses the centralized maintenance part management system wherein said necessary parts management device stores and maintains plant-by-plant inventory information indicating a quantity of said maintenance part stored in said plurality of plants and uses said plant-by-plant inventory information to evaluate whether said maintenance part is necessary (See Spira, Fig.22, Page 14, Paragraphs 0179-0180).

(N) As per claim 14, Spira discloses the centralized maintenance part management system, wherein said necessary parts management device stores and maintains plant-by-plant inventory information indicating a quantity of said maintenance part stored in said plurality of plants and uses said plant-by-plant inventory information to evaluate whether said maintenance part is necessary (See Spira, Fig.22, Page 14, Paragraphs 0179-0180).

(O) As per claim 15, Spira discloses the centralized maintenance part management system wherein said necessary parts management device stores and maintains plant-by-plant inventory information indicating a quantity of said maintenance part stored in said plurality of plants and uses said plant-by-plant inventory information to evaluate whether said maintenance part is necessary (See Spira, Fig.22, Page 14, Paragraphs 0179-0180).

(P) As per claim 16, Spira discloses the centralized maintenance part management system wherein said necessary parts management device stores and maintains plant-by-plant inventory information indicating a quantity of said maintenance part stored in said plurality of plants and uses said plant-by-plant inventory information to evaluate whether said maintenance part is necessary (See Spira, Fig.22, Page 14, Paragraphs 0179-0180).

(Q) As per claim 17, Cornett discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as a maintenance inspection progresses, when a single machine needs said maintenance parts to be shipped successively during said maintenance inspection (See Cornett, Col.15, lines 50-61; Col.21, lines 30-51).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(R) As per claim 18, Cornett discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as a maintenance inspection progresses, when a single machine needs said maintenance parts to be shipped successively during said maintenance inspection (See Cornett, Col.15, lines 50-61; Col.21, lines 30-51).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(S) As per claim 19, Cornett discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as said maintenance inspection progresses, when a single machine needs said maintenance parts to be

shipped successively during said maintenance inspection (See Cornett, Col.15, lines 50-61; Col.21, lines 30-51).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(T) As per claim 20, Cornett discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as a maintenance inspection progresses, when a single machine needs said maintenance parts to be shipped successively during said maintenance inspection (See Cornett, Col.15, lines 50-61; Col.21, lines 30-51).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(U) As per claim 21, Cornett discloses the centralized maintenance part management system wherein, said parts shipment management device determines a plurality of maintenance parts to be shipped successively as a maintenance inspection progresses, when a single machine needs said maintenance parts to be shipped successively during said maintenance inspection (See Cornett, Col.15, lines 50-61; Col.21, lines 30-51).

The motivation for combining the respective teachings of Spira and Cornett are as discussed in the rejection of claim 1 above, and incorporated herein.

(V) As per claim 22, Spira discloses a method of using a centralized maintenance part management system comprising the steps of: storing in a warehouse facility, in a centralized manner, a maintenance part for a plurality of types of machines located at a plurality of plants (See Spira, Fig.2, Page 6, Paragraph 0089); managing information about whether said maintenance part is necessary for said machines (See Spira, Page 8, Paragraph 0113).

Spira does not explicitly disclose specifying a maintenance part to be shipped from said warehouse facility based on said management information.

However, this feature is known in the art, as evidenced by Cornett. In particular, Cornett suggest specifying a maintenance part to be shipped from said warehouse facility based on said management information (See Cornett, Col.5, lines 24-45; Col.15, lines 50-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Cornett within the system of Spira with the motivation of allowing maintenance operation to be integrated into production in an intelligent manner. When used, production efficiency is maximized as is the use of available maintenance manpower. Engineering changes and machine upgrades are easily accommodated and spare parts inventory is kept at a minimum with minimum waste of spare parts (See Cornett, Col.6, lines 17-25).

(W) As per claim 23, Spira discloses the method of using the centralized

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maintenance part management system further comprising the step of: determining a maintenance part to be ordered and a quantity thereof based on inventory information of said maintenance part to be ordered in said warehouse facility or based on said management information (See Spira, Page 26, Paragraph 0341).

(X) Claims 24-28 recite the underlying process steps of the elements of claims 3-7, respectively. As the various elements of claims 3-7 have been shown to be either disclosed by or obvious in view of the collective teachings Spira and Cornett, it is readily apparent that the method disclosed by the applied prior art performs the recited underlying functions. As such, the limitations recited in claims 24-28 are rejected for the same reasons given above for system claims 3-7, and incorporated herein.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not the applied art teaches integrated manufacturing system (5,311,438) and Business Wire (SAP Delivers Complete Solution for Product Life-Cycle Management With mySAP.com) Business Wire. New York: Feb 23, 2000. pg.1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 571-272-6769. The examiner can normally be reached on 6:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zeender Ryan Florian can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vanel Frenel
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August 31, 2007